

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS TX 75202-2733.

JUL 1 2 2018

CERTIFIED MAIL 7014 0150 0000 2452 5493 RETURN RECEIPT REQUESTED

Mr. Sean Schnepper Senior EHS Manager Innophos, Inc. 10810 Highway 75 Geismar, LA 70734

RE: Innophos, Inc. Final Petition Approval Decision for DW#1 and DW#2

Dear Mr. Schnepper:

Effective the date of this letter, the Environmental Protection Agency (EPA) approves Innophos' petition for an exemption to the land disposal restrictions for wells DW#1 and DW#2.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148 provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed and by which exemptions pursuant to these petitions will be granted or denied.

A letter dated May 16, 2018, informed Innophos that EPA was proposing to approve its petition for an exemption to the land disposal restrictions. The public comment period associated with this decision began on May 24, 2018, and closed on July 9, 2018, and no comments were received.

Based on a detailed technical review of the petition request and support documents, EPA has determined that this information for the Innophos site meets the requirements of 40 CFR Part 148 by demonstrating that, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this land disposal restrictions exemption.

No-Migration Petition Approval Conditions

This approval of an exemption to allow the injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This exemption is applicable to the existing injection wells, DW#1 and DW#2, located at the Innophos Facility near Geismar, LA.

1. Injection of restricted waste shall be limited to the following injection intervals and corresponding injection zones:

Well	Injection Zone Depths	Injection Interval	Injection Interval Depths
DW#1	4,058' - 5,079' KB ¹	"4,800-Foot" Sand	4,626' – 5,079' KB ¹
DW#2	4,050' - 5,067' KB ²	"4,800-Foot" Sand	$4,620' - 5,067' \text{ KB}^2$

(¹Referenced to DW#1 Array Induction GR/SP/Caliper log run 01-Feb-2017 with a KB (Kelly Bushing) of +17' above Ground Level and + 36.63' above Mean Sea Level)
(²Referenced to DW#2 Borehole Compensated Sonic Microlog/GR/SP/Caliper log run 09-Jan-2017 with a KB of + 17' above Ground Level and + 37.00' above Mean Sea Level)

2. For DW#1 and DW#2, the cumulative monthly volume injected into the "4800-Foot" Sand injection interval shall not exceed that calculated as follows:

(250gpm/well)(1440 minutes/day)(number of days in that month)

- 3. Innophos shall cease injection into DW#1 and DW#2 by July 12, 2048.
- 4. The maximum cumulative volume injected into the "4,800-Foot" Sand injection interval shall not exceed 7,889,400,000 gallons.
- 5. The characteristics of the injected waste stream for DW#1 and DW#2 shall at all times conform to those described in Section III of the 2018 Innophos UIC No Migration Petition. The specific gravity of the waste stream shall remain within a range of 0.998 to 1.500 at 20°C(68°F)/20°C(68°F) and 1 atmosphere which is equivalent to a range of 0.999 to 1.501 at 15.5°C(60°F)/15.5°C(60°F) and 1 atmosphere.
- The approval for injection is limited to the following hazardous waste codes: D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D018, D021, D036
- 7. Innophos must petition for approval to inject additional hazardous waste codes, which are not included in Condition No. 6, above. However, waste codes containing approved constituents may be handled as a non-substantive revision to the petition if the concentration reduction factor for each constituent is not lower than currently modeled. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to 40 CFR §148.20 (e) or (f).
- 8. Innophos shall annually submit to EPA the results of bottom hole pressure surveys for DW#1 and DW#2. These surveys shall be performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with 40 CFR §146.68(e)(1). The annual report shall include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition. This should include a comparison of the current year's test results for the static and flowing bottomhole pressures with the values demonstrated in the approved petition and a comparison of the test results for transmissibility [Kh/μ (mD-ft/cP)] with the transmissibilities used in the approved petition demonstration for the pressure buildup and 10,000 year plume modeling.

the test results for transmissibility [Kh/ μ (mD-ft/cP)] with the transmissibilities used in the approved petition demonstration for the pressure buildup and 10,000 year plume modeling.

- Innophos shall annually submit to EPA a waste sample analysis for the constituents identified in Table VI-6 of the petition document, a radioactive tracer survey and an annulus pressure test for both DW#1 and DW#2.
- 10. Innophos shall notify EPA in the event that DW#1 or DW#2 loses mechanical integrity, prior to any well work, or if Innophos plans to plug either well. If any well work or plugging is being planned on either well, Innophos shall also submit the procedures to EPA for review prior to commencing any work.
- 11. Upon the expiration, cancellation, reissuance or modification of the Department of Natural Resources, Office of Conservation, Louisiana's Underground Injection Control Permit(s) for DW#1 and DW#2 this exemption is subject to review. A new demonstration may be required if information shows that the basis of granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this approval of a petition for exemption is contingent on the validity of the information submitted in the Innophos petition request for an exemption to the land disposal restrictions. This final decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Brian Graves at (214) 665-7193 or email him at graves.brian@epa.gov.

Sincerely,

Charles W. Maguire

Director

Water Division

ecc:

Mr. Ryan Harris, Innophos

Mr. Steve Lee, LDNR

Ms. Kellie McNamara, LDNR

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